



66% energy savings for London's traffic lights

GE's LEDs generate massive energy savings for cities

Transport for London

Transport for London (TfL) was founded in 2000 as part of the Greater London Authority and is the integrated government body responsible for London's transport system. Its role is to implement the transport strategy and to manage transport services across London.

Customer Challenge

The city of London is looking for technologies that can lead to energy and cost savings while also helping them to achieve their environmental objectives. London has committed to reducing its CO₂ emissions by more than 20% by 2020 and also aims to host the most environmentally sensitive Olympic Games to date in 2012.

In London, there are a total of 6,000 traffic signal sites across the city, which provide a significant opportunity for emissions savings.

Solution

GE's Light-Emitting Diodes (LED) lamps are a reliable and cost effective replacement for less efficient halogen systems. Combined with components from Traffic Engineering Systems, the LEDs can replace halogen lamps without replacing the existing signal heads or adjusting any part of the infrastructure controlling the operation of the traffic signals. LEDs are more energy efficient and durable than halogen lamps with each lamp typically consuming a third of the energy and, depending on the duty cycle, can last up to 7 years compared with just 6 months for halogen lamps.

In a pilot project, GE's LED traffic signalling systems have been trialled across 18 locations in the London Borough of Croydon since January 2007. By using these lamps compared with conventional halogen lamps, power consumption fell by 66%. TfL was encouraged by the project and commented that they were impressed by the results of the Croydon trial and see significant benefits for London, particularly in relation to helping them to achieve their energy saving targets and meet their objectives for more sustainable infrastructure.

This technology could lead to a huge saving of £1.6 million (€ 1.79 million) per annum for London in traffic signalling. However this system has even greater potential, as it is also relevant for other types of street equipment including street lighting.

For more information

GE Lighting
www.gelighting.com/eu

